

## South Delta Standards Background Information

The south Delta water quality objectives are measured at four locations (map attached) and are designed to protect agricultural beneficial uses. These locations are Vernalis (San Joaquin River at Airport Way Bridge), San Joaquin River at Brandt Bridge, Old River at Middle River, and Old River at Tracy Boulevard Bridge. The requirements for the latter three locations are generally referred to as the interior south Delta standards. Prior to the State Water Resources Control Board's Decision 1641 (adopted December 29, 1999 and revised March 15, 2000), there was never a water right holder responsible for meeting the interior south Delta standards.

### Interior South Delta Standards

Decision 1641, Section 10.3.2 states, "DWR and USBR are partially responsible for salinity problems in the southern Delta... [And] this order amends the export permits of the DWR and USBR to require the projects to take actions that will achieve the benefits of the barriers in the southern Delta to help meet the 1995 Bay-Delta Plan's interior Delta salinity objectives by April 1, 2005. Until then, the DWR and the USBR will be required to meet a salinity requirement of 1.0 mmhos/cm. If, after actions are taken to achieve the benefits of barriers, it is determined that it is not feasible to fully implement the objectives, the SWRCB will consider revising the interior Delta salinity objectives when it reviews the 1995 Bay-Delta Plan."

Per the Decision, the requirement for the irrigation period (April through August) will become stricter and drop from 1.0 to 0.7 mmhos/cm beginning April 1, 2005. This stricter requirement may return to 1.0 mmhos/cm if permanent barriers are constructed, or equivalent measures are implemented, in the southern Delta and an operations plan that reasonably protects southern Delta agriculture is prepared by DWR and the USBR and approved by the SWRCB's Executive Director. It was noted in the hearings for D-1641 that the projects would not be able to meet interior Delta standards under all circumstances. This is what led to the 5-year program for developing compliance with these standards.

The USBR and DWR are now, therefore, required to meet the salinity standard of 1.0 mmhos/cm year-round at the interior southern Delta stations. If these objectives are exceeded, a report is to be sent to the SWRCB's Executive Director. The Executive Director is to evaluate the report and make a recommendation to the SWRCB as to whether enforcement action is appropriate or the noncompliance is the result of actions beyond the control of the projects.

The interior south Delta standards have been and continue to be met incidentally as part of CVP and SWP water supply operations. The Temporary Barriers Project

however, is implemented specifically to improve water levels and circulation in the south Delta, which significantly helps to meet the interior standards.

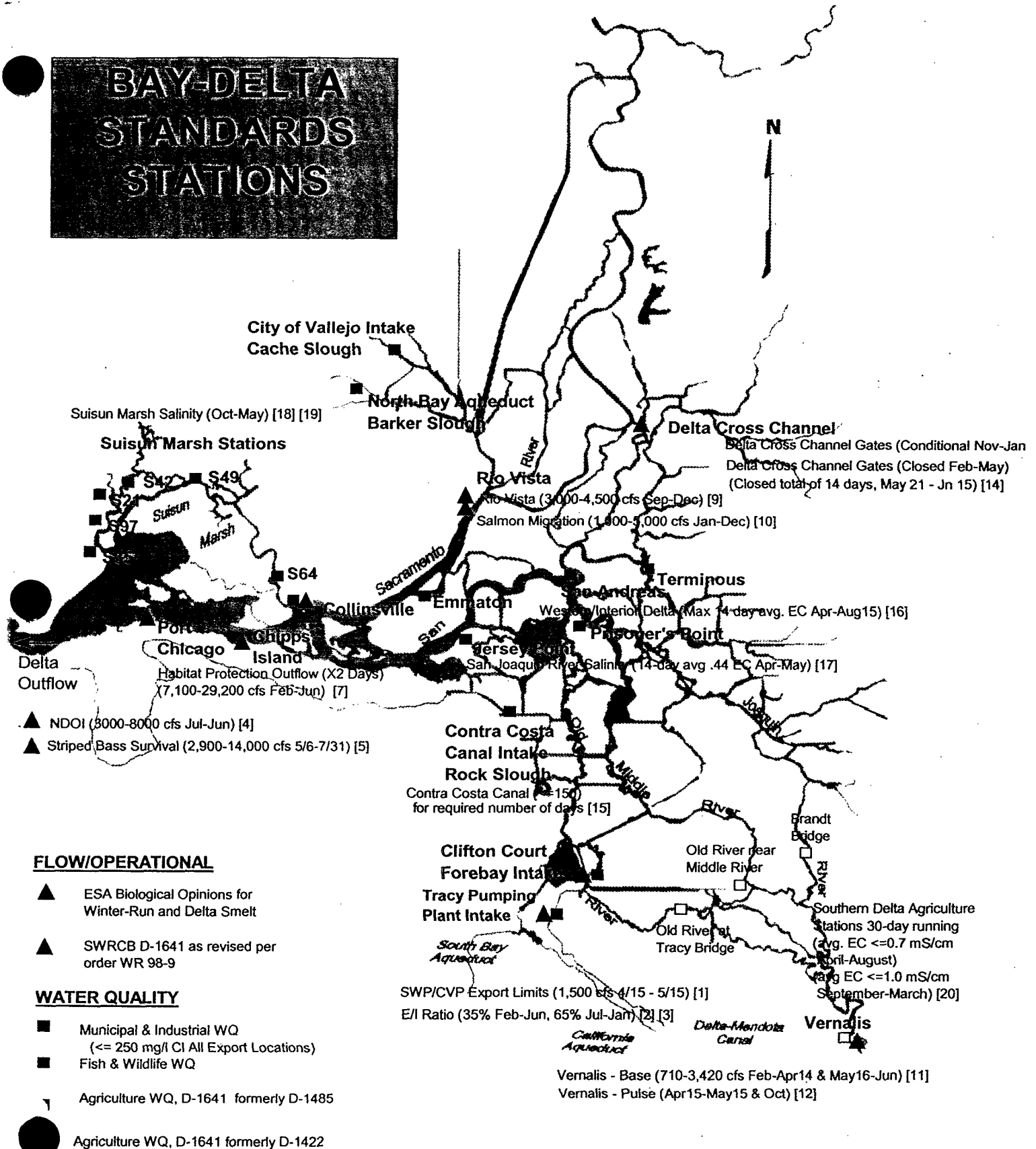
It is recognized in D-1641 that the barriers alone cannot guarantee compliance with the water quality objectives and that south Delta water quality is influenced by a variety of factors. Local agricultural drainage returns, the circulation of water in the south Delta channels and the factors that influence circulation, incoming water quality of the San Joaquin River, and the SWP/CVP exports (which generally provide improvements to water quality by improving circulation and drawing better quality water into the area) all influence south Delta water quality. The salinity problems in the south Delta frequently arise due to the dominant influence of local and upstream salts derived from local and upstream lands.

#### Vernalis Standard

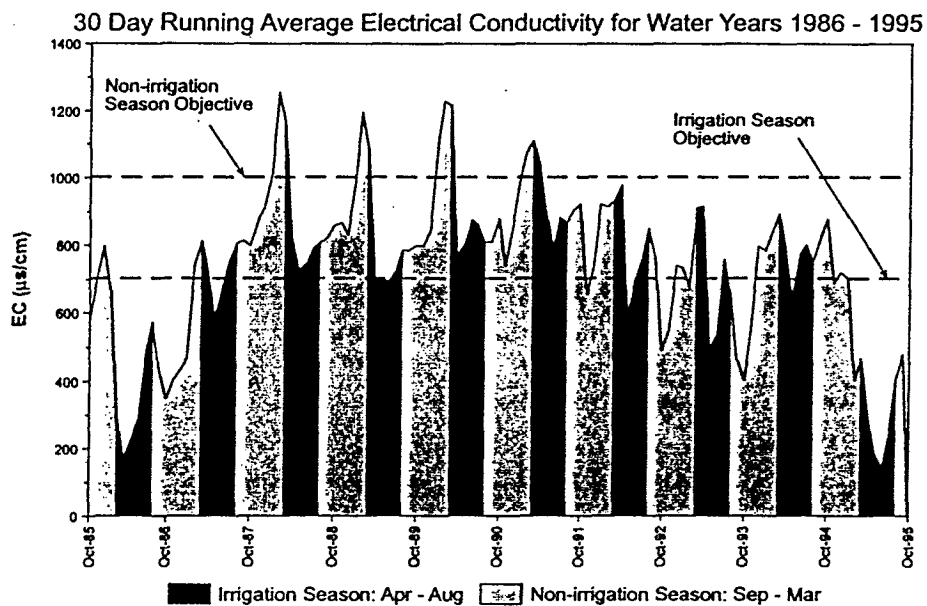
The USBR manages New Melones Reservoir to meet the Vernalis standard. The USBR has noted, in the context of meeting the 1994 Bay-Delta Accord and in testimony in the D-1641 hearings, that it cannot under all circumstances meet this standard solely using New Melones Reservoir.<sup>1</sup> Therefore, the SWRCB has directed the USBR to develop a program to meet it and, if after 5 years such a program has not or cannot be developed, the USBR is to report to the Executive Director all the actions taken in attempting to meet the objectives, including drainage and management alternatives. The Executive Director will evaluate the report and will decide whether further action should be taken by the SWRCB to ensure that the objectives are met.

<sup>1</sup> An analysis contained in the 1999 SWRCB's 1995 Bay/Delta Water Quality Control Plan EIR concludes the water quality at Vernalis during WY 1986-1995 exceeded 1.0 mmhos/cm 16% of the time and mostly during the non-irrigation season. It also concluded 0.7 mmhos/cm was exceeded 62% of the time, often during the irrigation season. (See attached figure.)

Figure 1



**Figure VIII-8**  
**San Joaquin River Near Vernalis**



**Figure VIII-9**  
**San Joaquin River Near Vernalis**

Percent of days that the 30-day running average electrical conductivity objective was exceeded for Water Years 1986 - 1995

